

#### ABSTRACT OF THE DISCLOSURE

A coat liquid, in which a methoxysilane or ethoxysilane compound which is a precursor of silicon oxide and an ethoxysilane or methoxysilane compound which contains therein 5 a carbon fluoride chain are dissolved, is applied onto the surface of a base material of SUS having a thickness of 20  $\mu\text{m}$ . This is followed by drying the base material for one hour at room temperature condition. Thereafter, the base material is baked at 200 degrees centigrade for 30 minutes thereby to 10 form a water repellent thin film having a thickness of from 10 nm to 1000 nm and containing therein a molecule in which fluoroalkyl chains are bonded to the silicon oxide. A nozzle orifice is formed by electrical discharge machining from the lower side of the base material.